

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S6	2	"HIGHLY DURABLE POLYBENZAZOLE COMPOSITION, FIBER AND FILM"	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:20
S4	3	"2490259".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/02 09:20
S3	1	"2490259".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:20
S2	1	"2490259".pn.	US-PGPUB; USPAT	OR	ON	2007/10/02 09:20
S7	3	"2003213127".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:22
S8	4	"743657".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:23
S11	1	"5725953".pn.	US-PGPUB; USPAT	OR	ON	2007/10/02 09:27
S9	1	"5772942".pn.	US-PGPUB; USPAT	OR	ON	2007/10/02 09:27
S5	0	"02490259".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:28
S12	2	"08315647".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:29
S16	2	"09078350".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:30
S15	2	"09078349".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/02 09:30
S17	39	(polybenzazole same (phosphoric))	US-PGPUB; USPAT	OR	ON	2007/10/02 09:37
S18	5	(polybenzazole same (phosphonate)) and 429/1-46.ccls.	US-PGPUB; USPAT	OR	ON	2007/10/02 10:39
S19	5	(polybenzazole same (phosphonate))	US-PGPUB; USPAT	OR	ON	2007/10/02 10:40
S22	15	S20 not (S21 or S19)	US-PGPUB; USPAT	OR	ON	2007/10/02 10:43
S20	54	(polybenzazole same (phospho\$3))	US-PGPUB; USPAT	OR	ON	2007/10/02 10:43
S21	39	(polybenzazole same (phosphoric))	US-PGPUB; USPAT	OR	ON	2007/10/02 10:46

## EAST Search History

S23	1204	(phosphoric adj acid) with (phosphonate)	US-PGPUB; USPAT	OR	ON	2007/10/02 10:47
S24	7	S23 and (429/1-46.ccls.)	US-PGPUB; USPAT	OR	ON	2007/10/02 10:51
S28	1	2003-902947.NRAN.	DERWENT	OR	ON	2007/10/02 10:52
S27	2	"20050053818"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 10:52
S26	1	"60367771"	US-PGPUB; USPAT; DERWENT	OR	ON	2007/10/02 10:52
S25	1	"60367771"	US-PGPUB; USPAT	OR	ON	2007/10/02 10:52
S29	31	("20010038937" "20020045085" "20040101731" "3224908" "3293088" "3313783" "3737045" "3808305" "4012303" "4075093" "4187333" "4537668" "4622276" "4634530" "5098985" "5211984" "5218076" "5312895" "5492996" "5599639" "5633337" "5643968" "5656386" "5674969" "6030718" "6078032" "6096369" "6110616" "6197147" "6248469" "6368587").PN.	US-PGPUB; USPAT	OR	ON	2007/10/02 14:33
S31	1	"6087032".pn.	US-PGPUB; USPAT	OR	ON	2007/10/02 14:37
S30	12	"6087032"	US-PGPUB; USPAT	OR	ON	2007/10/02 14:37
S32	4034	muellen-K\$.in. or klapper-m\$.in. or sinigersky-V4.in. or wu-w\$.in. or Uensal-O\$.in. or Ueasal-O\$.in. Baurmeister-J\$.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 14:41
S33	164	S32 and (polyazole or imidazole or benzimidazole)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 15:16
S35	118	S34 and (phosph\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 15:19
S36	62	S35 and (electrode or anode or cathode)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 15:20
S39	1	2003-845086.NRAN.	DERWENT	OR	ON	2007/10/02 15:57

## EAST Search History

S38	4	"2003075389"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 15:57
S41	1	2003-845057.NRAN.	DERWENT	OR	ON	2007/10/02 15:59
S37	3	"03075389"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 15:59
S43	1	2003-903501.NRAN.	DERWENT	OR	ON	2007/10/02 16:00
S40	4	"2003074596"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:00
S45	1	2004-061953.NRAN.	DERWENT	OR	ON	2007/10/02 16:01
S42	5	"2003092090"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:01
S47	1	2004-204382.NRAN.	DERWENT	OR	ON	2007/10/02 16:02
S44	3	"10220817"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:02
S48	4	"10210500"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:04
S46	4	"10235357"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:04
S50	1	2004-061953.NRAN.	DERWENT	OR	ON	2007/10/02 16:05
S49	4	"2003096464"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/02 16:05
S51	1	"5599639".pn.	US-PGPUB; USPAT	OR	ON	2007/10/03 11:16
S52	2	"09110982".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/03 18:01
S53	157	alicyclic	US-PGPUB; USPAT	OR	ON	2007/10/03 18:08
S54	6841	cyclic adj aliphatic	US-PGPUB; USPAT	OR	ON	2007/10/04 16:41

## EAST Search History

S1	2	"09110982"	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:14
S58	61	S57 not ester	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:17
S56	250	S55 not ester	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:17
S55	381	(alkyl adj phosphate) and (dimethyl or trimethyl or dialkyl or trialkyl)	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:17
S57	105	(alkyl adj phosphate) and (dimethyl or trimethyl)	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:19
S59	15	(alkyl adj phosphate) and ((dimethyl or trimethyl) adj phosphate)	EPO; JPO; DERWENT	OR	ON	2007/10/05 08:22
S60	232	(alkyl adj phosphate) and ((dimethyl or trimethyl) adj phosphate)	US-PGPUB; USPAT	OR	ON	2007/10/05 08:23
S61	114	(alkyl adj phosphate) same ((dimethyl or trimethyl) adj phosphate)	US-PGPUB; USPAT	OR	ON	2007/10/05 08:30
S62	65	(alkyl adj phosphate) with (general adj formula)	US-PGPUB; USPAT	OR	ON	2007/10/05 08:40
S63	561	(alkyl adj phosphate) with (phosphonate)	US-PGPUB; USPAT	OR	ON	2007/10/05 08:41
S65	705	(alkyl adj phosphate) same (phosphonate)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 08:43
S64	618	(alkyl adj phosphate) with (phosphonate)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 08:43
S66	5	(US-20060057454-\$ or US-20050112448-\$ or US-20050053818-\$ or US-20050019638-\$ or US-20070087248-\$).did.	US-PGPUB	OR	ON	2007/10/05 09:50
S69	0	S68 and dop\$3	US-PGPUB	OR	ON	2007/10/05 09:51
S68	6	(DE-10210500-\$).did. or (WO-2003075389-\$ or WO-2003092090-\$ or WO-2003096464-\$ or DE-10220817-\$ or DE-10235357-\$ or WO-2003074596-\$).did.	EPO; DERWENT	OR	ON	2007/10/05 09:51
S67	2	S66 and dop\$3	US-PGPUB	OR	ON	2007/10/05 09:51

## EAST Search History

S72	12	(US-20040062969-\$ or US-20050095486-\$).did. or (US-5725953-\$ or US-5218076-\$ or US-5772942-\$).did. or (EP-743657-\$).did. or (JP-09078349-\$ or JP-09078350-\$ or JP-2003213127-\$ or JP-08315647-\$).did. or (JP-09078349-\$ or JP-09078350-\$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 09:52
S71	1	S70 and dop\$3	US-PGPUB	OR	ON	2007/10/05 09:52
S73	2	S72 and dop\$3	US-PGPUB	OR	ON	2007/10/05 09:53
S75	3	"2002088219".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/05 10:12
S74	4	"1354907".pn.	EPO; JPO; DERWENT	OR	ON	2007/10/05 10:12
S78	2	"20020088219".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:13
S77	3	"2002088219".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:13
S76	2	"02088219".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:13
S81	1	"02003900".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:14
S80	2	"02003900"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:14
S79	3	"02088219"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:14
S85	1	"0476560".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:17
S34	181	S32 and (polyazole or imidazole or benzimidazole or \$7azole)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/10/05 10:19

## EAST Search History

S86	1738	(polyazole or imidazole or benzimidazole or \$7azole) same (dope or doped or doping)	US-PGPUB; USPAT	OR	ON	2007/10/05 10:21
S89	90	S87 and (phosphate or phosphonate)	US-PGPUB; USPAT	OR	ON	2007/10/05 10:22
S88	138	S87 and (phosphate or phosphoric or phosphonate)	US-PGPUB; USPAT	OR	ON	2007/10/05 10:22
S87	241	(polyazole or imidazole or benzimidazole or \$7azole) same ((dope or doped or doping) with acid)	US-PGPUB; USPAT	OR	ON	2007/10/05 10:22
S70	31	(US-20020045085-\$ or US-20040101731-\$ or US-20010038937-\$).did. or (US-5218076-\$ or US-6248469-\$ or US-6368587-\$ or US-6096369-\$ or US-6030718-\$ or US-5643968-\$ or US-5633337-\$ or US-5599639-\$ or US-5492996-\$ or US-5098985-\$ or US-4634530-\$ or US-4622276-\$ or US-4075093-\$ or US-4012303-\$ or US-3808305-\$ or US-3737045-\$ or US-6087032-\$ or US-6110616-\$ or US-5656386-\$ or US-6197147-\$ or US-5312895-\$ or US-5211984-\$ or US-5674969-\$ or US-4537668-\$ or US-4187333-\$ or US-3313783-\$).did. or (US-3293088-\$ or US-3224908-\$).did.	US-PGPUB; USPAT	OR	ON	2007/10/05 11:54
S90	34	(MEA or (membrane adj electrode adj assembly)) with (polyazole or imidazole or benzimidazole)	US-PGPUB; USPAT	OR	ON	2007/10/05 12:04
S93	24	S92 and (dip\$3 or coat\$3 or spray\$3 or laye\$3)	US-PGPUB; USPAT	OR	ON	2007/10/05 12:06
S92	25	S91 not S90	US-PGPUB; USPAT	OR	ON	2007/10/05 12:06
S95	33	S94 not (S93 or S90)	US-PGPUB; USPAT	OR	ON	2007/10/05 12:09
S91	36	(MEA or (membrane adj electrode adj assembly)) and ((PEM or (proton adj exchange adj membrane) or (polymer adj electrolyte adj membrane)) with (polyazole or imidazole or benzimidazole))	US-PGPUB; USPAT	OR	ON	2007/10/05 12:09

## EAST Search History

S96	8	(US-20060014065-\$ or US-20050244695-\$ or US-20050084727-\$ or US-20060280982-\$ or US-20060154128-\$ or US-20060115711-\$ or US-20060199070-\$).did. or (US-6124060-\$).did.	US-PGPUB; USPAT	OR	ON	2007/10/05 12:51
S98	1	"4453991".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 12:52
S97	3	S96 and (ionomer)	US-PGPUB; USPAT	OR	ON	2007/10/05 12:52
S99	1	"3849243".PN.	USPAT; USOCR	OR	ON	2007/10/05 12:53
S94	72	(MEA or (membrane adj electrode adj assembly)) and ((PEM or (proton adj exchange adj membrane) or (polymer adj electrolyte adj membrane)) same (polyazole or imidazole or benzimidazole))	US-PGPUB; USPAT	OR	ON	2007/10/05 12:55
S100	12	(ionomer with (polyazole or imidazole or benzimidazole))	US-PGPUB; USPAT	OR	ON	2007/10/05 12:56
S102	17	(charge with ((polyazole or imidazole or benzimidazole) with (phosphate or phosphonate)))	US-PGPUB; USPAT	OR	ON	2007/10/05 12:58
S101	1759	(charge with (polyazole or imidazole or benzimidazole))	US-PGPUB; USPAT	OR	ON	2007/10/05 12:58
L9	1109	"pK.sub.B"	US-PGPUB; USPAT	OR	ON	2007/10/11 18:29
L18	35	"R'.sub.3CO"	US-PGPUB; USPAT	OR	ON	2007/10/11 18:34
L15	123	"H.sub.3" adj C adj O	US-PGPUB; USPAT	OR	ON	2007/10/11 18:34
L23	7101	methanol and (dissociation adj constant)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:37
L22	3	("H.sub.3" adj C adj O) and (dissociation adj constant)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:37
L25	43	(dissociation adj constant) with methanol	US-PGPUB; USPAT	OR	ON	2007/10/11 18:39
L28	790	26 and (compounds)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:40
L30	112	26 and (inherent or inherency)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:41
L29	860	26 and (inherent or inherency or constant)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:41

## EAST Search History

L26	860	((dissociation adj constant) with base) and temperature	US-PGPUB; USPAT	OR	ON	2007/10/11 18:42
L32	4	((dissociation adj constant) with base) same (inherent or inherency)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:43
L31	1	((dissociation adj constant) with base) with (inherent or inherency)	US-PGPUB; USPAT	OR	ON	2007/10/11 18:43